

## Abstract

The invention relates to a magnetron coating system, comprising a first coating source, an auxiliary substrate, a magnetron and means for determining the area density of the auxiliary substrate. The auxiliary substrate is thereby arranged between the first coating source and the area that is provided to receive the substrate to be coated, and forms a cathode for the magnetron. The invention further relates to a method for depositing thin layers, in which a layer is deposited on an auxiliary substrate by means of a first coating source and this auxiliary substrate is used as a cathode for coating a substrate by means of a magnetron and the area density of the auxiliary substrate is determined.